

Claim status:

1. (Previously presented) A phase division multiple access (PDMA) system, the system comprising:

at least one receiver logic combiner, the at least one receiver logic combiner adapted to generate a plurality of relatively prime composite PN codes, wherein each of the plurality of composite PN codes are separated by a predetermined PN phase.

2. (Previously presented) A PDMA system as in claim 1, further comprising at least three first receiver pseudo-noise (PN) component code generators coupled to the at least one receiver logic combiner, wherein each of the at least three first receiver pseudo-noise (PN) component code generators generate relatively prime PN component codes.

3. (Previously presented) A PDMA system as in claim 2 further comprising at least one PN phase delay coupled to one of the at least three first receiver PN component code generators.

4. (Previously presented) A PDMA system as in claim 2 wherein the at least three first receiver pseudo-noise (PN) component code generators comprise four first receiver PN component code generators.

5. (Previously presented) A PDMA system as in claim 3 wherein the predetermined PN phase substantially equals a phase offset in the relatively prime composite code substantially equal to at least one combination epoch of the relatively prime PN component codes not slipped.

6. (Previously presented) A PDMA system as in claim 1 wherein the receiver logic combiner comprises a MAND logic combiner.
7. (Previously presented) A PDMA system as in claim 1 wherein the receiver logic combiner comprises a MAJ logic combiner.
8. (Previously presented) A PDMA system as in claim 1 wherein the receiver logic combiner comprises a MOD logic combiner.
9. (Cancelled)
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11. (Cancelled)
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13. (Cancelled)
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17. (Cancelled)
18. (Cancelled)
19. (Canceled)
20. (Canceled)
21. (Canceled)

22. (Previously presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for generating multi-phase composite pseudo-noise (PN) codes, the method comprising:

generating a first composite PN code, wherein generating the first composite PN code comprises:

generating a plurality of relatively prime PN component codes;

combining the plurality of relatively prime PN component codes;

generating a second composite PN code, wherein the second composite code is PN phase separated from the first composite PN code wherein generating the second composite PN code comprises:

generating the plurality of relatively prime PN component codes;

PN phase delaying one of the plurality of relatively prime PN component codes; and

combining the plurality of relatively prime PN component codes.

23. (Previously presented) A program storage device as in claim 22 wherein the program of instructions comprise at least one Very High Speed Integrated Circuit (VHSIC) Hardware Description (VHDL) Language file.

24. (Previously presented) A phase division multiple access (PDMA) system, the system comprising:

at least one receiver logic combiner, the at least one receiver logic combiner adapted to generate a plurality of relatively prime composite PN codes, wherein each of the plurality of composite PN codes are separated by a predetermined PN phase;

at least three first receiver pseudo-noise (PN) component code generators coupled to the at least one receiver logic combiner, wherein each of the at least three first receiver pseudo-noise (PN) component code generators generate relatively prime PN component codes;

at least one PN phase delayer coupled to one of the at least three first receiver PN component code generators; and

wherein the predetermined PN phase substantially equals a phase offset in the relatively prime composite code substantially equal to at least one combination epoch of the relatively prime PN component codes not slipped.